



INTO THE WILD BLUE—The wild goose, student of the philosophy of the "wandering foot," prepares to take off on his northern journey as summer approaches.

WILDLIFE

Trek of the Wild Goose

The wild geese are northbound after a southern winter. Their flocks reduced by disease and hunting season, they can find haven in sanctuaries across the country.

► TO the tune of a popular new song which has driven the nation's singers to torments of wanderlust, a great semiannual migration is now in full swing in the United States. Turn your radio to any dial. Sooner than later you'll hear:

"Tonight I heard the wild goose cry . . ."

You well might. From the Carolinas to California, wild geese are northbound. Along four major U. S. flyways they herald the coming of spring as they wing toward far northern marshes and the fierce battles of geese courtship.

You may have to look high and hard to see them. After months of hunting seasons and normal disease, reduced flocks of the "honkers" are lining out for breeding grounds and new families.

Richard Griffith, director of waterfowl research in national wildlife refuges, is more concerned about the actual wild goose situation than about the free publicity given his charges by the ballad, "Cry of the Wild Goose."

"We have enough trouble stretching our appropriation to maintain enough refuges," he says. "Now I have to hear that song hummed in the corridors outside my office."

If all the would-be wanderers really were to "go where the wild goose goes," wildfowl experts say they would wind up in pretty desolate country. They would spend the summer on lonely tundras inside the Arctic Circle, on the shores of Hudson Bay, in marshes from the coast of Labrador to the Aleutian Islands.

That is where the wild geese are going. Up the four well-charted flyways—the Atlantic seaboard, the Mississippi valley, the wheat-belt Central flyway, the Pacific coast—geese by the tens of thousands are heading home.

A hundred years ago, before high-powered shells, rapid-fire shotguns and the traps of market hunters, before prairie sloughs and marshlands were drained to make room for more wheat and corn and Louisiana sugarcane, wild geese flew up and down the expanse of the United States by the millions.

They were almost killed off completely. Then alarmed hunters joined conservationists in demanding controls.

Now, to protect them, the Wildlife Service maintains 201 wildfowl refuges across the country. Last year's appropriation to maintain these sanctuaries was \$1,500,000. They cover 3,250,000 acres.

Yet in some years, the waterfowl people report, 40% to 50% of America's wild geese are killed in their annual visit to the United States. Hunters account for about 10% of the flocks. Disease and waterfowl parasites boost the casualty list.

So if you hear a trumpeting "ka-RONK", look up quickly. The wild geese are fleeing the land of high-powered shells, flying north again to their far-off tundras.

Chances are, you'll see the great "V" formation of the Canadas. The largest and most widely distributed of the migratory geese, the long-necked Canada goose follows all four flyways. He will be heading for the great marshes of the Canadian provinces, from the lower Yukon valley of Alaska east to the coast of Labrador, and north to Arctic coastlines.

The handsome Canada has a black head and neck, broken by patches of white on each cheek; gray-brown upper body and wings; and a pale-gray chest and breast fading to pure white on the belly and tail.

Or you might see the legendary snow goose, flying very high in the sky toward the Arctic Circle, his white body offset by jet black wingtips.

Others in the list of 10 to 12 families of geese on this continent winter in the same localities every year, return north by the same flyways.

From the Louisiana marshes will come the blue goose, known also as the bald-headed brant, the blue wavey—or just plain "skillet head." He'll be heading up the Mississippi to areas inside the Arctic Circle in Canada's Northwest Territory or on Baffin Island.

Along the Pacific coast will come the Western Canadas and the lesser Canadas, the cackling geese ("greasers" or "yelpers"), Ross's goose ("wart-nosed wavey") tule goose, white-fronted goose and the black brant. The lesser snow goose will be there, his brother the greater snow goose across the continent on the Atlantic. So also the American brant, smallest of the geese with the exception of Ross's goose, not much bigger than a mallard drake.

And what do the wild geese know?, the song would ask.

They know how to keep away from hunters, two-legged or four-legged, for they are the wariest of American wildfowl. While feeding in flocks, sentinels are posted, their long necks rigidly upright while others pry into mud banks and bog bottoms for the last roots of grass and plants.

Yet their gregariousness sometimes allows them to be tricked within gunshot range by decoys. Boys in Massachusetts once employed "flyers," young birds thrown into the air or catapulted off cliffs at the approach of a flock. Their parents would be staked out on the beach near the shooting blind.

The wild geese, seeing the flyers circling, would follow them down to their doom.

Now live decoys such as these have been outlawed.

The wisest gander of the flock normally leads the great "V" formation. Wild geese can fly more than 60 miles an hour, some of them. But their size often makes them appear deceptively slow.

Ahead of the young ganders in the spring are the rites and fights of wooing a mate for the summer's mating. The battles between ganders sometimes last nearly an hour. Their powerful wings and blunt bills can give a lot of punishment.

Having driven off competitors, the successful swain woos his mate with loud hisses and rustling of feathers. He reaches his long neck caressingly around her, and her neck moves in response.

By mid-summer, with goslings in the nest, the parents begin to moult. Their feathers loosen and drop out. Unable to fly, they remain hidden in reeds and marshes, relying on swimming to escape danger.

By the end of August, in the farthest north, the geese have new plumage. They're ready for their great flight back south, telling farmers and hunters that winter is almost upon them.

But now the wild geese are headed north. In warming forests, Indians will call, "The waveys are back." And the ice will be breaking up in the bays and rivers. Another summer will be just around the corner.

Science News Letter, April 8, 1950

ENGINEERING-AGRICULTURE

Alcohol-Powered Cars May Solve Crop Surpluses

➤ ONE of chemistry's great dreams—the day all automobiles will be powered partly by alcohol—has been described as a solution for the country's periodic headache, crop surpluses.

Dr. Philip J. Schaible, director of a Cincinnati, Ohio research council which seeks new uses for wastes from the nation's distilleries, told the National Farm Chemurgic Council the dream will some day become a reality.

Scientists have long known: 1. alcohol can be made not only from crops such as grain and potatoes but from crop wastes and wood wastes; and 2. alcohol-water-injection in gasoline engines can boost their power and save gasoline.

Edward W. Russell, former managing editor of the London Morning Post, told the convention that countries such as England that must import oil "sooner or later will find alcohol-water-injection essential."

Dr. Schaible predicted that grain alcohol for use as motor fuel would end grain surpluses in the U. S.

"But practical application to our economy is still something for the future," he said.

Science News Letter, April 8, 1950

CONSERVATION

End to Dust Bowl Days

➤ "DUST storm conditions in the Midwest are not nearly so bad as those which existed in the 1930's," Dr. Mark L. Nichols, chief of research for the Department of Agriculture's Soil Conservation Division, stated.

"A prolonged dry spell might make conditions much worse, but even so, we have the machinery and the techniques with which to fight back against dust storms," he pointed out.

Dr. Nichols said that soil conservation officials had expected a much greater loss of top soil in dust storms but timely rains last fall had held the loss down.

Soil conservation experts lost ground in their battle against erosion during the war. The farmers' patriotic duty to feed the world, plus the excellent price for wheat then, combined to lead many farmers to abandon the stabilized rotation which is the main weapon against erosion and dust storms.

"Now," according to Dr. Nichols, "we have gained back the ground lost during the war and are even a little ahead of where we were before the war."

He pointed to 2,300 soil conservation districts in the country, set up under state law by the farmers themselves. Each district has a board of supervisors which advises farmers how to rotate crops, how and where to plant grass which holds topsoil on the surface and how and where to plant windbreaks.

"Much remains to be done, however," he

went on. "But, if we continue our present rate of progress, then I think that the country has dust storms whipped."

Science News Letter, April 8, 1950

On This Week's Cover

➤ THAT a young man has no priority on the gentle thoughts of love in the spring-time is proved by two mongoose lemurs, shown on the cover, inhabitants of the National Zoo. The lemur which belongs to a primitive group of the primates is closely related to the monkeys. It has a pointed snout, usually long and sharp, but sometimes short and blunt. Each one has nostrils like those of a cat or dog and big, round eyes. There is always a gap between the upper middle incisor teeth and the lower front teeth are small and lean forward, so that they look like a comb, the conventional explanation of the arrangement being that the lemur uses these teeth to comb his hair. The mongoose lemur eats fruits and vegetables, but is also fond of birds' brains which are sucked into the mouth after the skull of the bird has been cracked with the teeth. These mammals are to be found largely in Madagascar although some of their smaller relatives are to be found in Africa.

Science News Letter, April 8, 1950



PRE-ROMAN FIGURINE—A product of the recent excavations in South Austria, the pre-Roman clay figurine is tentatively associated with the worship of the local Celtic god, Mars Latobius. Discovery has been made that a site on the Magdalensburg, a mountain near Klagenfurt, the capital of Carinthia, was not only a Roman settlement but also the center of the pre-Roman population, the lost capital of the Kingdom of Noricum.